NOTE:

AMERON TO INSTALL 3 CONCRETE ELECTROLIERS.
EDISON TO INSTALL RISER AND SERVICE TO ELECTROLIERS.

POLES TO BE INSTALLED 2' BEHIND CURB FACE.

NEW YORK

483925H
50

CI: SL4777183E (101)
CI: 1- SL PL 25' CONC OCT 4' ARM+
CI: 1- SL 100W HPS COBRA HD FLAT LAMP & PC+
CF: 107- CM DUCT 2" AND LESS
CF: 107- CM DUCT FOR EXCAVATION
IN: 107- CBL #8 AL 2-1/C 600V CLP IN DUCT

Pole / Riser Detail
507450E
Run 10'
Riser 45'
Total 55'
N

(1) EXISTING 507450H
50' Class C4
EX: 0- TR OH 7.5KVA 4KV 120/240 1P
IN: 2- RSR 3" TO 2" EXTENSION
IN: 1- TM 2-1/0 & 1-#2 600V 1P UG TO OH
CF: 10- CM DUCT 2 1/2" TO 4"
CF: 10- CM DUCT FOR EXCAVATION
IN: 55- CBL 2-1/0 1-#2 AL 3-1/C 600V IN DUCT
CF: 1- S HH CONC 10-1/2"X17"X24"
CF: 1- SS TAX EXCV CST FOR CONCRETE HH
IN: 1- CNN BAR INS LT DUTY #8-350 1P 4-WAY

C.F. (2) 107' 1 1 1/2 HH TO STLT IN: 107' #8

C.F. (1) 10' 1 3 POLE TO HH IN: 55' 1/0

CF: 10-1/2"X17"X24" CONCRETE HH

C.F. (3) 86' 1 1 1/2 HH TO STLT IN: 86' #8

97'

25'

147'

99'

(102) CI: SL4777184E
CI: 1- SL PL 25' CONC OCT 4' ARM+
CI: 1- SL 100W HPS COBRA HD FLAT LAMP & PC+
CF: 86- CM DUCT 2" AND LESS
CF: 86- CM DUCT FOR EXCAVATION
IN: 86- CBL #8 AL 2-1/C 600V CLP IN DUCT

C.F. (4) 137' 1 1 1/2 STLT TO STLT IN: 158' #8

MICHIGAN AVE

CURB

97'

1952102E
40
25/4

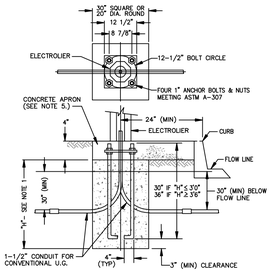
517980H
50

HUMPHREYS

CURB

(103) CI: SL4777185E
CI: 1- SL PL 25' CONC OCT 4' ARM+
CI: 1- SL 100W HPS COBRA HD FLAT LAMP & PC+
CF: 137- CM DUCT 2" AND LESS
CF: 137- CM DUCT FOR EXCAVATION
IN: 137- CBL #8 AL 2-1/C 600V CLP IN DUCT

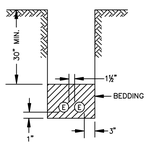
ELECTROLIER FOUNDATION FOR FIBERGLASS NOSTALGIC, FIBERGLASS, STEEL, OR CONCRETE ELECTROLIERS
SEE UGS MS 890.1



NOTES:
1. THE FOOTING DEPTH WILL VARY DEPENDING ON THE TYPE OF SOIL AND WIND LOADING REQUIREMENTS. CONSULT LOCAL GOVERMENT AGENCY FOR REQUIREMENTS. SEE TABLE MS 890-1 THROUGH TABLE MS 890-4.
2. FOUNDATION SHALL BE INSTALLED AFTER CONDUIT (FOR UNDERGROUND SERVICE), CURBS, AND SIDEWALKS ARE IN PLACE AND GRADES ARE ESTABLISHED.
3. CONCRETE TO REACH A MINIMUM COMPRESSION STRENGTH OF 2800 PSI IN 28 DAYS. SEE UGS 20.3.
4. PLACE A MINIMUM SIZE CONCRETE APRON OF 30" X 30" X 4" THICK AROUND THE POLE AT GROUND LEVEL TO PROVIDE A CONSTRAINED SURFACE CONDITION WHEN REQUIRED. GROUT TO BE PLACED AFTER POLE IS SET AND PLUMBED.

D104: Rev. 01/21/09

TYPICAL CONDUIT BANK SECTION
SEE UGS CD 120



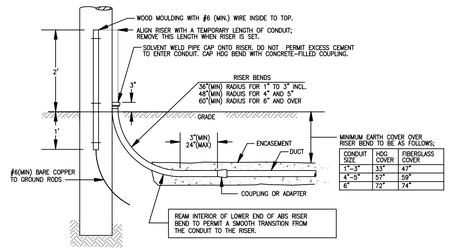
DIRECT BURIAL
SIMILAR CONSTRUCTION FOR FEWER CONDUIT
2 CONDUITS MAX.

D81: Rev. 09/23/09

UNDERGROUND SERVICE ALERT
1-800-422-4133
or
1-800-227-2600
Call USA
For Underground Locating
2 Working Days Before You Dig

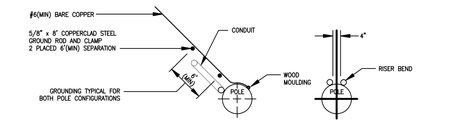
WARNING
THE EXCAVATOR MUST TAKE ALL STEPS NECESSARY TO AVOID CONTACT WITH UNDERGROUND FACILITIES WHICH MAY RESULT IN INJURY TO PERSONS OR DAMAGE TO FACILITIES IN THE AREA. THE INDICATED LOCATIONS OF EDISON UNDERGROUND FACILITIES, AS PROVIDED, ARE BELIEVED TO BE ACCURATE. HOWEVER, THE FINAL DETERMINATION OF EXACT LOCATIONS AND THE COST OF REPAIR TO DAMAGED FACILITIES IS THE RESPONSIBILITY OF THE EXCAVATOR.

POLE RISER BEND STANDARD LOCATION



MINIMUM EARTH COVER OVER RISER BEND TO BE AS FOLLOWS:

CONDUIT SIZE	HDG COVER	FIBERGLASS COVER
1"-3"	33"	47"
4"-5"	57"	59"
6"	72"	74"



1. APPROVED RISER BENDS ARE SHOWN ON FOLLOWING TABLE:

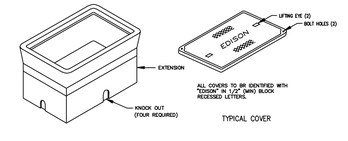
MATERIAL	SIZE 1"	1-1/2"	2"	2-1/2"	3"	4"	5"	6"
PVC	–	–	–	X	X	X	X	–
FIBERGLASS	–	–	–	–	X	X	X	X
HDG	X	X	X	X	X	X	X	X

NOTE: 6" HDG OR FIBERGLASS RISER BEND SHALL BE USED WHEN SPECIFIED ON THE WORKING DRAWING. SEE UGS AC 702 FOR GROUNDING HDG RISER BENDS.

2. THE TOP AND BOTTOM OF 3", 4", 5" OR 6" FIBERGLASS BENDS ARE FURNISHED WITH PERMANENTLY ATTACHED PVC COUPLINGS. ALSO INCLUDED IS A 6" LONG 3", 4", 5" OR 6" SCHEDULE 80 PVC STUB-OUT, SOLVENT WELDED INTO THE TOP COUPLING. SEE UGS CD 166 FOR FIBERGLASS RISER BEND MATERIAL INFORMATION AND SUPPLIERS.
3. TWO GROUND RODS ARE REQUIRED AT ALL PRIMARY RISER POLES. DRIVE RODS IN TRENCH BOTTOM WITH 6" MINIMUM SEPARATION IN UNDISTURBED EARTH. LEAVE THE ROD TOPS 3" ABOVE THE TRENCH BOTTOM AND ATTACH CONTINUOUS GROUND WIRE WITH "CAM" TYPE CLAMPS. EXTEND WIRE TO INDICATED LOCATION ON POLE AND STUB UP 2" ABOVE GRADE IN WOOD MOULDING. ALL GROUNDING MATERIALS FURNISHED BY CONTRACTORS. SEE UGS AC 703 FOR APPROVED GROUNDING MATERIALS.
4. ENCASEMENT REQUIRED ONLY WHEN CALLED OUT ON WORKING DRAWING.
5. PVC RISERS MAY BE SUBSTITUTED FOR FIBERGLASS FOR STRAIGHT RUNS OF 150' OR LESS IN CONDUIT SIZES 4" AND UNDER.
6. 4/0 BARE COPPER NEUTRAL WHEN REQUIRED TO BE INSTALLED IN TRENCH, CONTRACTOR TO PICK UP AT SCE DIST. YARD

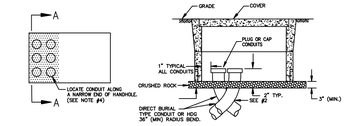
REF: UGS SB 160
DTM REV: 04/16/07

TYPICAL HANDHOLE INSTALLATION
SEE UGS HP 205



TYPICAL ASSEMBLY (WITHOUT COVER)

TYPICAL COVER



CONDUIT LOCATION

SECTION A-A

NOTES:
1. SEE UGS HP 200 FOR DIMENSIONS OF VARIOUS SIZE HANDHOLES AVAILABLE.
2. RADIUS ANGLE MAY BE REDUCED TO LESS THAN 90° PROVIDING THE PROJECTED CENTER LINE OF THE CONDUIT CLEARS HANDHOLE OPENING.
3. TWO HOLD DOWN DEVICES TO BE SUPPLIED WITH EACH HANDHOLE.
4. ALL CONDUITS SHOULD BE INSTALLED WITHIN THE SHADED AREA.

REF: UGS HP 205
DTM REV: 08/28/07

CONCRETE PRODUCTS
Precast concrete item complete with neck. Cover and inserts may be obtained from any of the following listed and approved manufactureres:

JENSEN PRECAST
14221 San Bernardino Ave., Fontana, Calif. 92335
Phone: (909) 350-4111
(800) 257-6100

UTILITY VAULT CO.
10650 Hemlock Ave., Fontana, Calif. 92335
Phone: (909) 428-3700
(800) 626-3860

FOR HANDHOLE AND PULLBOX MANUFACTURERS, SEE UGS HP 200.

D41: Rev. 07/12/07

CONSTRUCTION NOTES:

Unless otherwise specified on the working drawing which forms a part of the specification, the Contractor/Developer shall furnish the following items at no cost to the Edison Company.

Southern California Edison Company has attempted to correctly show all existing utilities and substructures in the vicinity of the work, but does not guarantee there are no other substructures in the area. Failure of SCE to show all substructures in their correct location will not be a basis for a claim for extra work, and the contractor shall be responsible for all damages to substructures whether shown or not.

1. FOR GENERAL SPECIFICATIONS SEE UGS GI 001.

2. CONDUIT:
   a. Minimum cover in street or parkway is 30" below gutter grade, unless noted otherwise.
   b. Minimum cover on private property is 30" below finished grade, unless noted otherwise.
   c. Contractor is to furnish and install approved conduit to Edison specifications per UGS CD 100.1, 110 AND 120.
   d. For the type of conduit for this job, See UGS CD 110.1.
   e. Install all risers per UGS CD 160, 161, 162 and 170.
   f. Cap all mainline conduits per UGS CD 148 and service conduits per UGS CD 150.
   g. Install blank conduit plugs in all conduits terminating into Vaults, Manhole's, PMH's, SOE's & all cap locations, per UGS CD 180.1 & UGS CD 180.2
   h. Install pull rope in all conduit runs. Pull rope to be 1/4" polypropylene or polyethylene rope, braided or twisted. For specifications, approved makes, and suppliers, see UGS GI 040.
   i. All conduit must be mandreled with the approved mandrel UGS CD 197.

3. CONDUIT RADIUS REQUIREMENTS:
   a: The minimum radius for bends are:
      36" for conduits 3" in diameter or smaller
      48" for conduits 4" and 5" in diameter
      60" for 6" diameter conduit
   b: The minimum radius for all sweeps of all mainline conduits is 12'-6" (unless noted otherwise).

4. EXCAVATION AND BACKFILL:
   a. Work area shall be cleared and rough graded to within four inches of final grade prior to installation of Edison conduit or structures.
   b. All excavations shall be in accordance with the California State Construction Safety Orders (when applicable), Edison specifications, and all governing local ordinances.
   c. Each trench to be a uniform depth below final grade prior to installation of Edison conduit or structures.
   d. Backfill shall be provided by the Contractor for all excavations and shall include crushed rock, concrete, and/or imported backfill, when required.
   e. Backfill with a MINIMUM of one sack per yard sand cement slurry around and over vaults and manholes per UGS GI 030, section 6.4 and around PMH's within one foot of finished grade, per UGS SS 590.1.
   f. Backfill, per Edison specifications, shall immediately follow conduit or substructure installation. At no time shall conduit be left exposed over 24 hours.
   g. No rocks are allowed within 12 inches of direct-buried cables or any conduit without concrete encasement. Native backfill capable of passing through a one-half inch mesh screen shall be considered to be "rock free". If existing backfill does not pass through a 1/2" screen, place imported sand 3" below and 12" above Edison cables. After this point, no rocks larger than 12" diameter are permitted.
   h. All backfill shall be compacted to meet or exceed local ordinances or other requirements. It shall be placed in a manner that will not damage the conduit or substructure or allow future subsidence of the trench or structures.

5. PAVING:
   Repaving, where required, shall be placed in such a manner that interference with traffic, including pedestrian traffic, will be kept to a minimum. The Contractor shall establish a program of repaving acceptable to the Municipality, County, or other authority having jurisdiction and which is acceptable to Edison.

6. STRUCTURES:
   a. All substructures shall be constructed or installed to Edison specifications.
   b. Install protection barriers per UGS MS 830 when required in areas exposed to traffic, per Edison Inspector.
   c. All conduit lines and concrete floored substructures shall be water tight.
   d. All grounding materials shall be furnished and installed by the Contractor.

7. RETAINING WALLS:
   When required, retaining walls shall be provided by the Developer. Walls are required wherever grade rises more than 18 inches above the structure or 24" above the pad surface at a distance of 5 feet from the same, or in areas subject to erosion. Design and installation must comply with local building ordinances.
   Refer to Edison Inspector for typical space requirements.

8. PERMITS:
   All permits necessary for excavation shall be provided by the Contractor/Developer.

9. ACCESS:
   Heavy truck access shall be maintained to equipment locations. Structures must be clear of all oppurtenances that would obstruct the loading or unloading of equipment.

10. SERVICES:
    a. Meters and services shall comply with Edison Electrical Services Requirements.
    b. Wiring must be in accordance with applicable local ordinances and approved by local Inspection Authorities.

11. LOCATION:
    a. The location of excavations and structures for Edison shall be as shown on the working drawing. No deviation from the planned locations will be permitted unless approved by the Edison Inspector. See UGS GI 001, section 2.2.
    b. Actual location of obstructions, storm drains, and/or other foreign utilities to be the responsibility of the Contractor. See UGS GI 001, section 2.3.

12. Contractor is to verify location and widths of all sidewalks and driveways prior to street light installation. See UGS CD 175.1, UGS CD 175.2 and UGS CD 175.3.

13. SURVEY:
    Surveying of street improvements, property corners, lot lines, finished grade, etc., necessary for the installation of underground facilities must be completed and markers or stakes placed prior to the start of the installation. In addition, Developer shall maintain the markers during the installation and inspection by Edison. Grade and property line stakes must show any offset measurements.

14. COORDINATION AND SUPERVISION:
    The Developer shall provide supervision over and coordination among the various contractors working within the development in order to prevent damage to Edison facilities. He is responsible for the cost of repairs, replacement, relocation, or other corrections to Edison facilities made necessary by his failure to provide supervision or to otherwise comply with these specifications.

15. TELEPHONE AND OTHER UTILITY REQUIREMENTS:
    The drawing prepared for this job may also cover the facilities to be installed for the telephone company and/or other utility. Any questions concerning details of their installation should be referred to the company concerned.

16. OWNERSHIP:
    Developer is to deed to the Edison Company all structures shown hereon except those shown as customer owned.

17. WARRANTY:
    Applicants expressly represent and warrant that all work performed and all material used in meeting Applicants' obligations herein are free from defects in workmanship and are in conformity with Southern California Edison Company's requirements. This warranty shall commence upon receipt by Applicants of Company's final acceptance and shall expire one year from that date. Applicants agree to promptly correct to the Company's satisfaction and that of any governmental agency having jurisdiction and at Applicant's expense any breach of this warranty which may become apparent through inspection or operation of underground electric system by Company during this warranty period.

18. INSPECTION:
    Inspection is required during the construction period. A 48 hour advance notice of intent to start construction is required from the contractor to the Southern California Edison Company. Standards of Edison construction requirements are available upon request.

Duct and Structure Inspector: SCHEDULING DEPT. Phone: 323-720-5284
Cabling Construction Coordinator: Phone:

D05: Rev. 07/17/07

N

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

SCALE: 1" = 30'
0 30 60

CHICAGO 4KV O/O BELVEDERE

DISTRICT 22 – MONTEBELLO	PROJ. MGR. ALATORRE, ELDA M PHONE 323-720-5214		PLANNER ALATORRE, ELDA M PHONE 323-720-5214		
FOREMAN	TRUCK NO.	P/E	INVENTORY MAP NO. 126-4236-1	THOMAS GUIDE LAC 635 F6	GRID NO.
DESIGN NO. 385602_0.01					
CSD 140 Y ___ N ___	BY-PASS EXISTING ___ CODE CHANGE TO ___		TLM ___ CHECKED ___ %LOAD	J.P.A. NO.	ASSOCIATED DESIGN NO.
PRODUCT/SAP NO. 556604-ST LT INSTALLATION	PRODUCT/SAP NO.		PRODUCT/SAP NO.		
PROPOSED CONSTRUCTION (LOCATION) XSTRT HUMPHREYS/MICHIGAN LOS ANGELES					
TYPE	APPROVED BY	DATE	CHECKED BY	DRAWN BY	PAX #
SHEET 1 OF 1	JOB NO. 385602_0.01				

Southern California Edison Company